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01/29/2008

EXAMINER

DAO, THUY CHAN

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/971,720

Applicant(s)

HOULDING, DAVID IAN

Examiner

Thuy Dao

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,8,11,13-15,32,34,41 and 45-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,11,13-15,32,34,41 and 45-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on November 5, 2007 has been entered.

2. Claims 1-5, 7-8, 11, 13-15, 32, 34, 41, and 45-55 have been examined.

### **Response to Amendments**

3. Per Applicant's request, claims 1, 32, 41, and 48-50 have been amended.

4. The objection to claim 41 is withdrawn in view of Applicants' amendments.

### **Response to Arguments**

5. Applicant's arguments filed on have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections – 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 7-8, 13-15, 32, 34, 41, 45-52, and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg (art of record, US Patent No. 5,974,572) in view of US Patent No. 7,031,968 to Kremmer et al. (art made of record, hereinafter "Kremmer").

**Claim 1:**

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Weinberg discloses a computer-readable medium and a *method for providing a visualization of an underlying architecture of a software system within a network* (e.g., col.5: 56 – col.6: 7; col.6: 8-39), *said method comprising:*

*accessing a datafile descriptive of the underlying architecture* (e.g., FIG. 10, col.22: 27-67, blocks 140-150, block 164 HTML File Returned? YES, block 166 Parse HTML; col.7: 40-65; col.5: 40-47);

*transforming the datafile to determine architectural components used to form the underlying architecture* (e.g., FIG. 3, col.11: 8-38; FIG. 13, col.25: 10-58);

*rendering, via a visualizer, a plurality of graphical elements representative of the architectural components, the graphical elements forming a graphical representation of the underlying architecture* (e.g., FIG. 4, col.16: 27 – col.17: 8; FIG. 6, col.17: 28-40),

*the graphical representation dependent on a particular mode of a plurality of modes of operation of the visualizer* (e.g., FIG. 7, col.18: 3-58, Astra Core (Framework) 94 includes various operations performed by Plug-Ins 96);

*displaying, on a web page, the graphical representation of the underlying architecture of the software system* (e.g., FIG. 14, col.25: 60-67, Web Browser 196)

*providing at least one control on the web page; receiving a selection of the at least one control; performing a graphical operation on the web page distinct from the rendering step for dynamic visualization of the graphical elements indicative of the underlying architecture of the software system* (e.g., FIG. 15, col.26: 1-47);

*wherein the dynamic visualization provides a graphical representation of collaborative interactions between the architectural components of the underlying architecture of the software system; communicating the rendered graphical representation across the network* (e.g., FIG. 12, col.24: 25 – col.25: 44);

*wherein the visualizer is utilized for visualizing, using the web page, the underlying architecture of the software system during conceptual, development and deployment phases of the software system* (e.g., FIG. 7, col.18: 3-58, Link Doctor, Action Tracker, Test World, Load Wizard, Search Meter; col.7: 40 – col.8: 14); and

*wherein the underlying architecture comprises non-visual components that provide for back end operability of the software system (e.g., col.21: 33-47; col.23: 4-37; col.32: 37-47; col.33: 9-23).*

Weinberg does not explicitly disclose *the underlying architecture consists of non-visual components.*

However, in an analogous art, Kremmer further discloses *the underlying architecture consists of non-visual components (e.g., col.4: 24-42; col.5: 3-12; col.7: 22-40; col.7: 56 – col.8: 11; col.12: 45-58; col.18: 50-67).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kremmer's teaching into Weinberg's teaching. One would have been motivated to do so to monitor server/back-end activities, parameters, actions, and further information as suggested by Kremmer (e.g., col.7: 22-40; col.7: 56 – col.8: 11).

**Claim 2:**

The rejection of claim 1 is incorporated. Weinberg also discloses *generating a plurality of subsections of a graphical image; and locating the graphical elements in the subsections as described by the datafile (e.g., FIG. 6, col.17: 28-40).*

**Claim 3:**

The rejection of claim 1 is incorporated. Weinberg also discloses *the subsections are displayed as tiers (e.g., FIG. 6, col.17: 28-40, home page as a root tier, one or more first-level tiers, ..., and one or more leaf tiers).*

**Claim 4:**

The rejection of claim 1 is incorporated. Weinberg also discloses *providing access to the visualization on a network (e.g., FIG. 12, col.24: 25 – col.25: 44).*

**Claim 5:**

The rejection of claim 4 is incorporated. Weinberg also discloses *the network is the Internet* (e.g., col.24: 25 – col.25: 44).

**Claim 7:**

The rejection of claim 1 is incorporated. Weinberg also discloses *receiving data for said rendering from a network connection* (e.g., FIG. 10, col.22: 27-67).

**Claim 8:**

The rejection of claim 7 is incorporated. Weinberg also discloses *storing the data* (e.g., FIG. 12, col.24: 25 – col.25: 44).

**Claim 13:**

The rejection of claim 1 is incorporated. Weinberg also discloses *altering the graphical elements based on a selected configuration of the software system* (e.g., FIG. 6, col.17: 28-40).

**Claim 14:**

The rejection of claim 1 is incorporated. Weinberg also discloses *receiving an event initiated by an operation performed in a second graphical display operating in isolation of actual components of the underlying architecture; and performing an operation on the graphical display based on the event* (e.g., FIG. 16, col.27: 8-32, buttons 73, 220).

**Claim 15:**

The rejection of claim 1 is incorporated. Weinberg also discloses *receiving an event initiated by an operation performed in a second graphical display operating in conjunction with actual components of the underlying architecture; and performing an operation on the graphical display based on the event* (e.g., col.27: 8-32).

**Claim 32:**

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Claim 32 is a computer-readable medium version, which recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 32.

**Claim 34:**

The rejection of claim 32 is incorporated. Claim 34 recites the same limitations as those of claim 5, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 34.

**Claim 41:**

Weinberg discloses *an application service provider (ASP) system for visualizing an underlying architecture of another distinct software system (e.g., col.23: 4-37; col.5: 56 – col.6:7; col.6: 8-39), the ASP system comprising:*

*a datafile including a description of the underlying architecture (e.g., FIG. 10, col.22: 27-67, blocks 140-150, block 164 HTML File Returned? YES, block 166 Parse HTML; col.7: 40-65);*

*a host computing system for transforming the datafile (e.g., FIG. 3, col.11: 8-38; FIG. 13, col.25: 10-58);*

*a visualizer for receiving the transformed datafile and visualizing the architecture, the visualizer operating in one of a plurality of modes of operation (e.g., FIG. 4, col.16: 27 – col.17: 8; FIG. 6, col.17: 28-40);*

*a visual display for receiving and displaying the visualized underlying architecture of said another distinct system; wherein the visualizer is utilized for visualizing the underlying architecture of the system during conceptual, development and deployment phases of the system (e.g., FIG. 7, col.18: 3-58, Astra Core (Framework) 94 includes various operations performed by Plug-Ins 96);*

*wherein the visual display is a web page on the Internet (e.g., FIG. 14, col.25: 60-67, Web Browser 196);*

*wherein the visual display includes at least one control (e.g., FIG. 15, col.26: 1-47);*

*wherein the at least one control is adapted to perform a graphical operation on the web page distinct from the rendering step for dynamic visualization of architectural components of the underlying architecture of said another distinct software system (e.g., FIG. 12, col.24: 25 – col.25: 44);*

*wherein the dynamic visualization provides a graphical representation of collaborative interactions between the architectural components of the underlying architecture (e.g., FIG. 7, col.18: 3-58, Link Doctor, Action Tracker, Test World, Load Wizard, Search Meter; col.7: 40 – col.8: 14); and*

*wherein the underlying architecture comprises non-visual components that provide for back and operability of said another distinct software system (e.g., col.21: 33-47; col.23: 4-37; col.32: 37-47; col.33: 9-23).*

Weinberg does not explicitly disclose *the underlying architecture consists of non-visual components.*

However, in an analogous art, Kremmer further discloses *the underlying architecture consists of non-visual components* (e.g., col.4: 24-42; col.5: 3-12; col.7: 22-40; col.7: 56 – col.8: 11; col.12: 45-58; col.18: 50-67).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kremmer's teaching into Weinberg's teaching. One would have been motivated to do so to monitor server/back-end activities, parameters, actions, and further information as suggested by Kremmer (e.g., col.7: 22-40; col.7: 56 – col.8: 11).

**Claim 45:**

The rejection of claim 1 is incorporated. Weinberg also discloses *the step of rendering comprises the step of rendering, via the visualizer, a plurality of graphical elements representative of conceptual architectural components, the visualizer rendering the graphical elements in a direct interaction simulation mode* (e.g., FIG. 4, col.16: 27-67; FIG. 6, col.17: 28-40).



**Claim 46:**

The rejection of claim 1 is incorporated. Weinberg also discloses *the step of rendering comprises the step of rendering, via the visualizer, a plurality of graphical elements representative of conceptual and developed architectural components, the visualizer rendering the graphical elements in a prototype simulation mode (e.g., FIG. 12, col.24: 25 – col.25: 44).*

**Claim 47:**

The rejection of claim 1 is incorporated. Weinberg also discloses *the step of rendering comprises the step of rendering, via the visualizer, a plurality of graphical elements representative of developed architectural components, the visualizer rendering the graphical elements in an architecture driven monitor mode (e.g., col.16: 27 – col.17: 40).*

**Claim 48:**

Weinberg discloses *a method for providing a visualization of an underlying architecture of a software system within a network (e.g., col.23: 4-37; col.5: 56 – col.6:7; col.6: 8-39), said method comprising:*

*accessing a datafile descriptive of the underlying architecture (e.g., FIG. 3, col.11: 8-38; FIG. 13, col.25: 10-58);*

*datafile to determine architectural used to form the components visualizer (e.g., FIG. 4, col.16: 27 – col.17: 8; FIG. 6, col.17: 28-40),*

*a plurality of graphical elements representative of the architectural components, the graphical elements forming a graphical representation of the underlying architecture (e.g., FIG. 10, col.22: 27-6; col.7: 40-65);*

*performing a graphical operation on the graphical representation for dynamic visualization of the graphical elements indicative of the underlying architecture of the software system (e.g., FIG. 7, col.18: 3-58);*

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*wherein the dynamic visualization provides a graphical representation of collaborative interactions between the architectural components of the underlying architecture of the software system (e.g., FIG. 15, col.26: 1-47; FIG. 12, col.24: 25 – col.25: 44);*

*communicating the rendered graphical representation across the network; (e.g., FIG. 14, col.25: 60-67, Web Browser 196; FIG. 7, col.18: 3-58; col.7: 40 – col.8: 14); and*

*wherein the underlying architecture is of a back end of the software system and comprises non-visual components (e.g., col.21: 33-47; col.23: 4-37; col.32: 37-47; col.33: 9-23).*

Weinberg does not explicitly disclose *the underlying architecture consists of non-visual components.*

However, in an analogous art, Kremmer further discloses *the underlying architecture consists of non-visual components* (e.g., col.4: 24-42; col.5: 3-12; col.7: 22-40; col.7: 56 – col.8: 11; col.12: 45-58; col.18: 50-67).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kremmer's teaching into Weinberg's teaching. One would have been motivated to do so to monitor server/back-end activities, parameters, actions, and further information as suggested by Kremmer (e.g., col.7: 22-40; col.7: 56 – col.8: 11).

#### **Claim 49:**

Claim 49 is a computer-readable medium version, which recites the same limitations as those of claims 1 and 48, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 49.

#### **Claim 50:**

Claim 50 is an application service provider (ASP) version, which recites the same limitations as those of claims 1 and 48, wherein all claimed limitations have been

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addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 50.

**Claim 51:**

The rejection of claim 41 is incorporated. Weinberg also discloses *the visualization is displayed as a graphical user interface having the at least one control for altering the visualization* (e.g., FIG. 14, col.25: 60-67).

**Claim 52:**

The rejection of claim 21 is incorporated. Weinberg also discloses *the at least one control initiates a simulated event* (e.g., col.26: 1-47).

**Claim 54:**

The rejection of claim 41 is incorporated. Weinberg also discloses *receives an event initiated by an operation performed in a graphical user interface operating in isolation of actual components of the architecture; and performs an operation on the visual display based on the event* (e.g., col.27: 8-32).

**Claim 55:**

The rejection of claim 41 is incorporated. Weinberg also discloses *said host computing system further: receives an event initiated by an operation performed in a graphical user interface operating in conjunction with actual components of the underlying architecture; and performs an operation on the visual display based on the event* (e.g., col.27: 8-32).

8. Claims 11 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg in view of Kremmer and further in view of Arcuri (art of record, US Patent No. 6,792,475).

**Claim 11:**

The rejection of claim 1 is incorporated. Weinberg does not explicitly disclose *the datafile includes extensible markup language (XML)*.

However, in an analogous art, Arcuri further discloses *the datafile includes extensible markup language* (e.g., col.2: 40-51).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Arcuri's teaching into Weinberg's teaching. One would have been motivated to do so to apply HTML and XML files to a hierarchical website structure as suggested by Arcuri (e.g., col.2: 40-51).

**Claim 53:**

Claim 53 is an application service provider (ASP) version, which recites the same limitations as those of claim 11, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 53.

**Conclusion**

9. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao

A handwritten signature in black ink, appearing to read 'Tuan Dam', with a stylized flourish at the end.

**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**